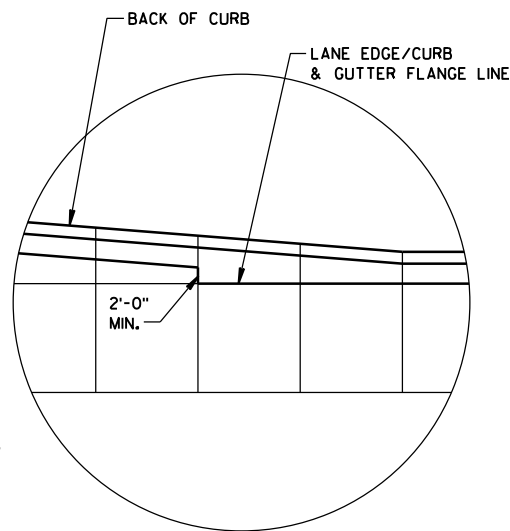
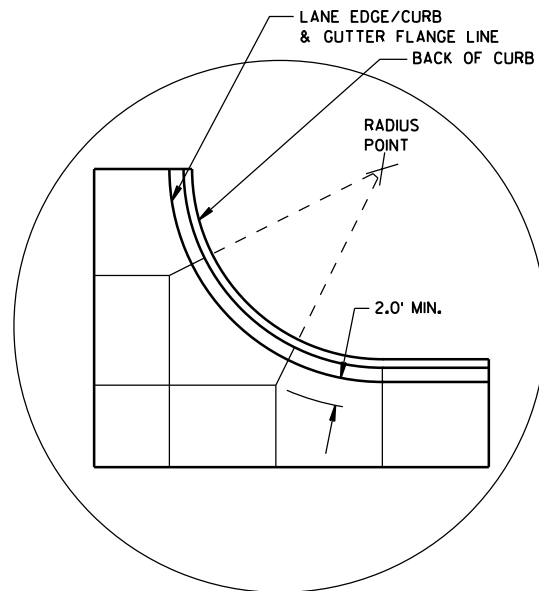


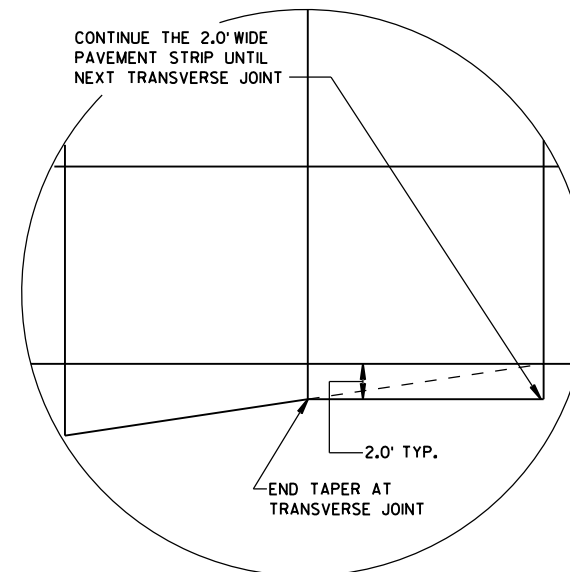
DETAIL "A"



DETAIL "B"



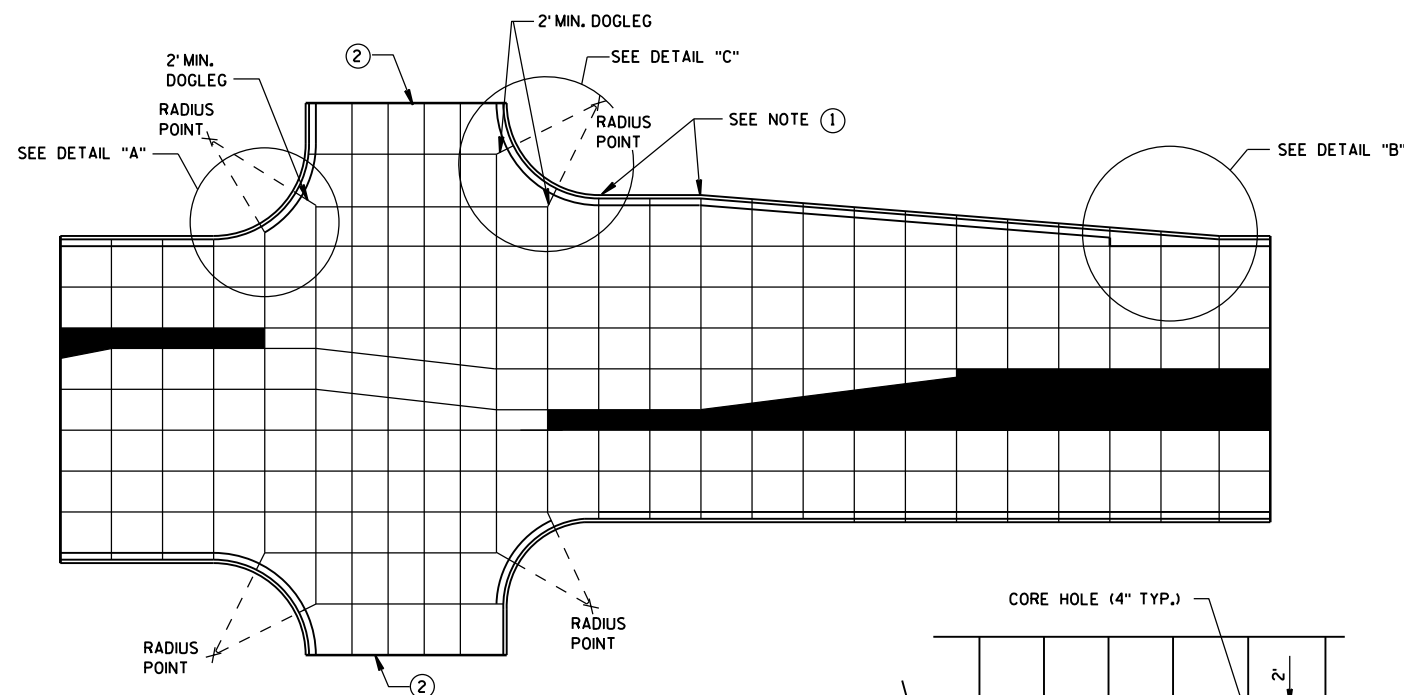
DETAIL "C"



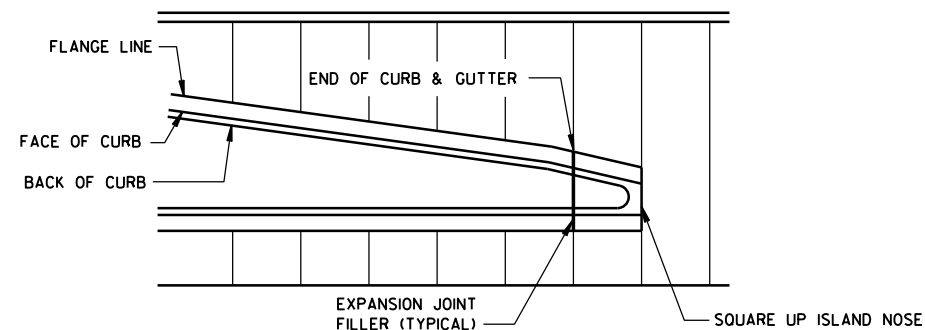
DETAIL "D"

## GENERAL NOTES

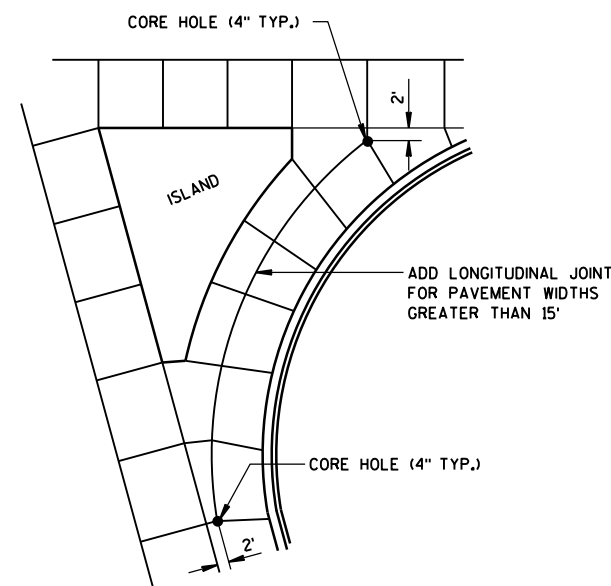
- THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.
- ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.
- CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.
- ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.
- AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.
- SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.
- AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
  2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
  3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



STANDARD INTERSECTION



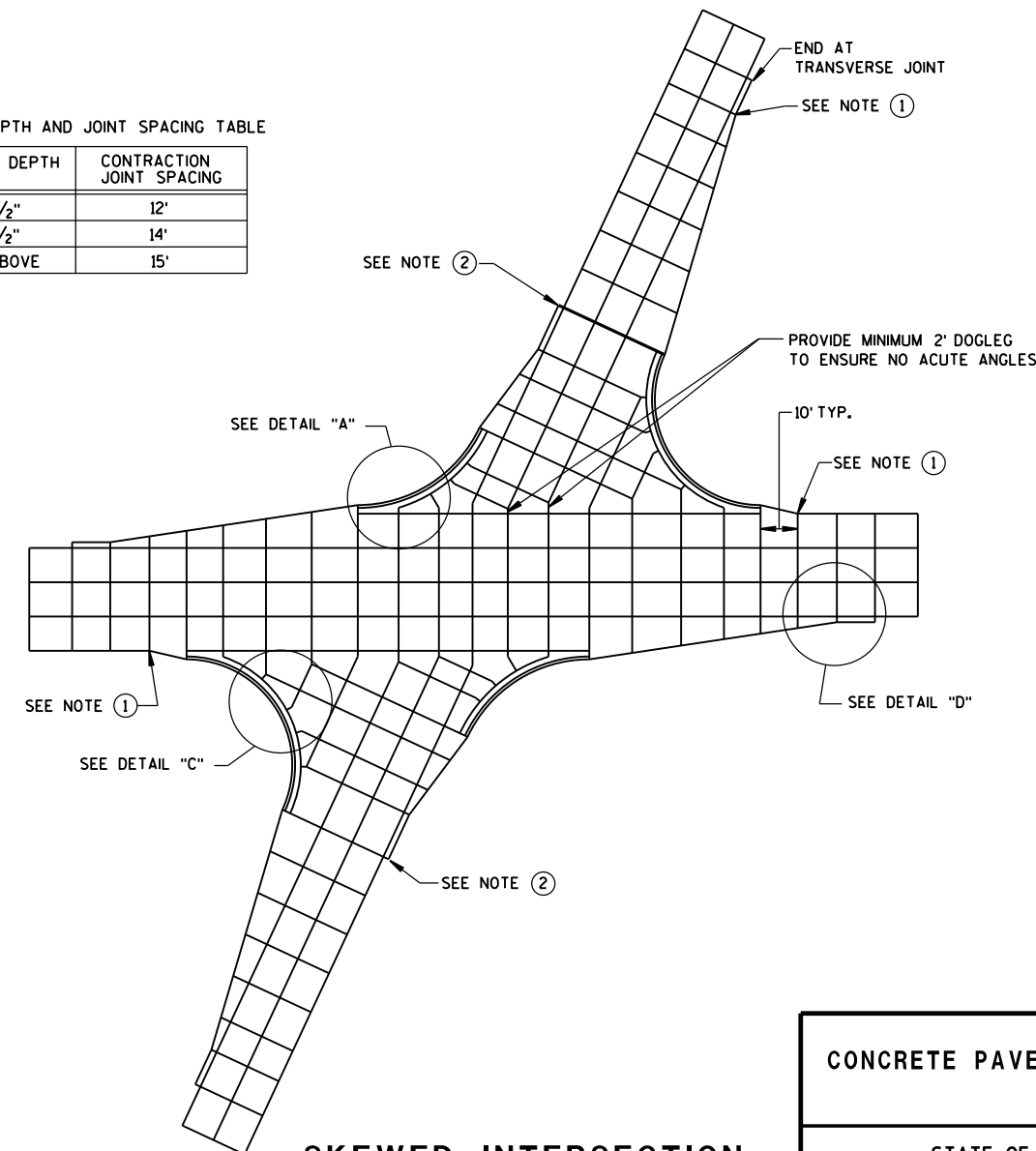
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

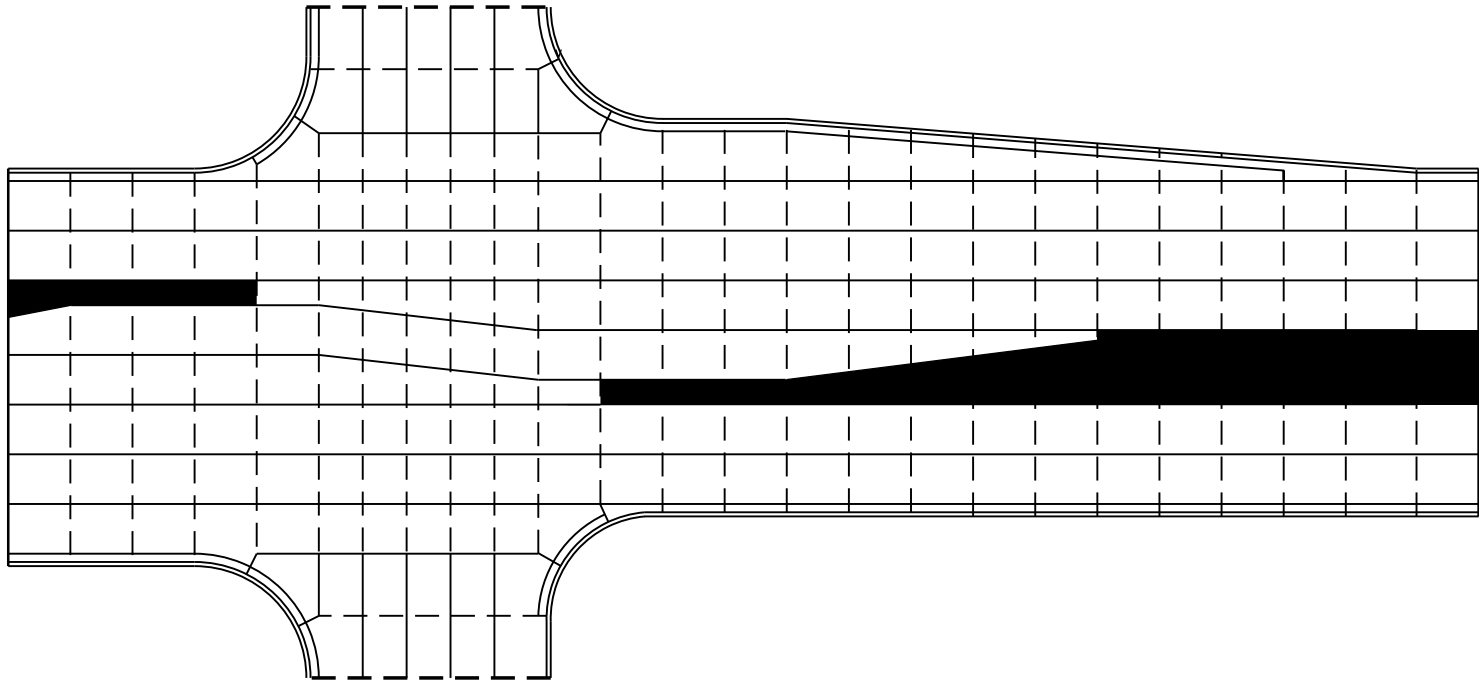


**LEGEND**

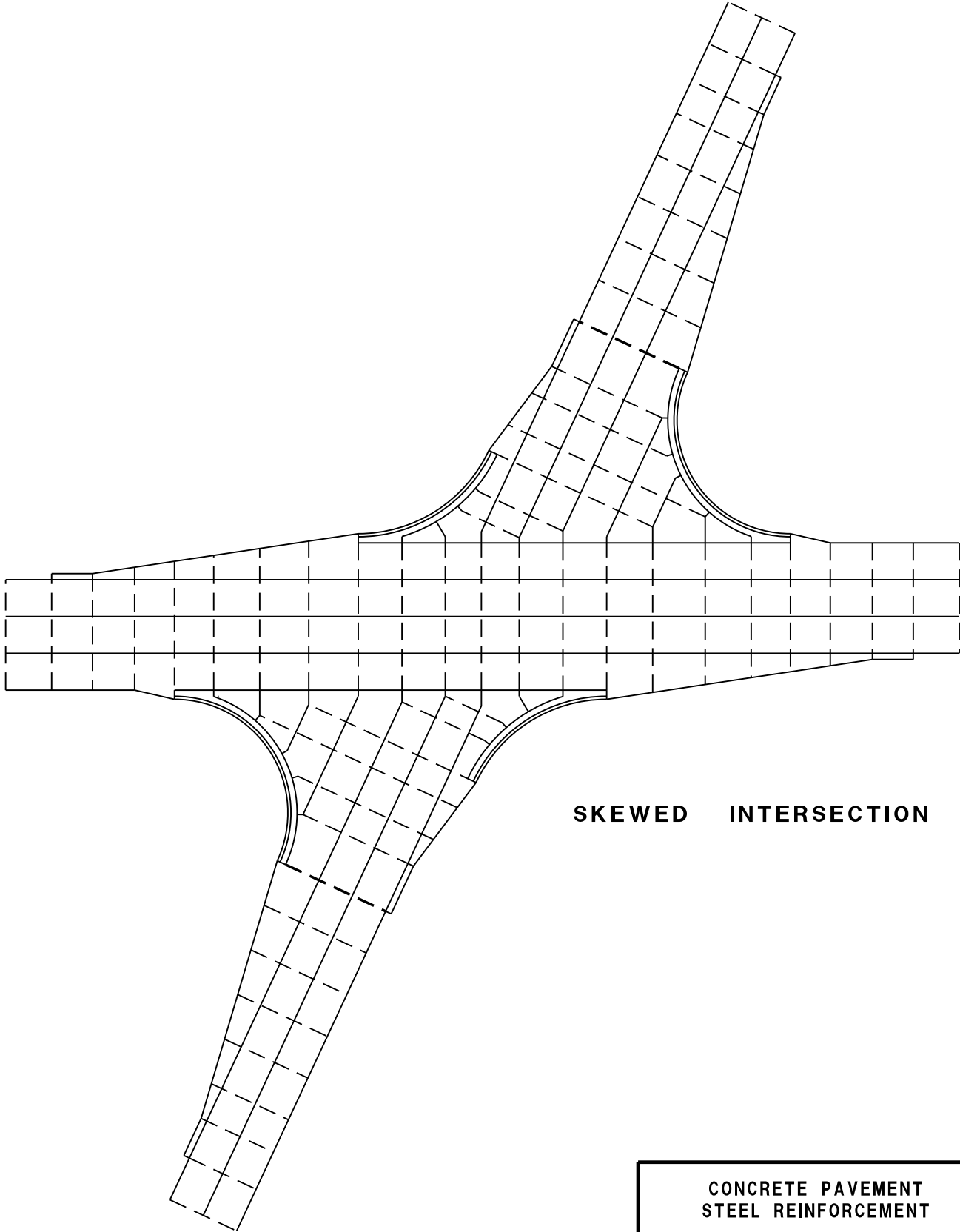
- POTENTIAL DOWELED EXPANSION JOINT
- - - DOWELED JOINT
- TIED JOINT

**GENERAL NOTES**

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



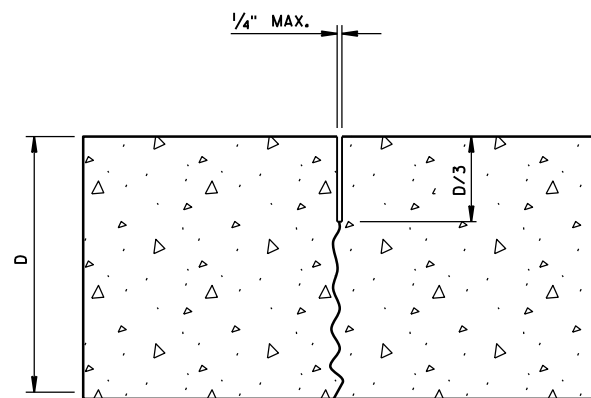
**STANDARD INTERSECTION**



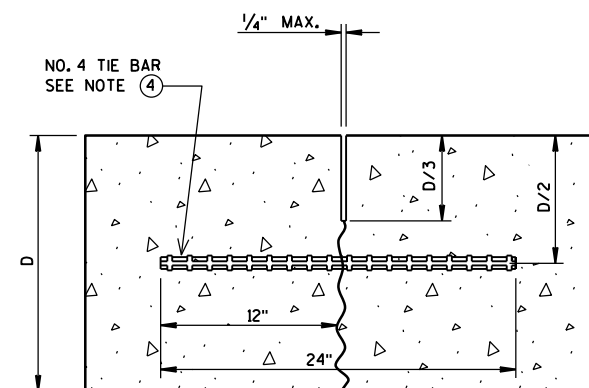
**SKEWED INTERSECTION**

CONCRETE PAVEMENT  
STEEL REINFORCEMENT

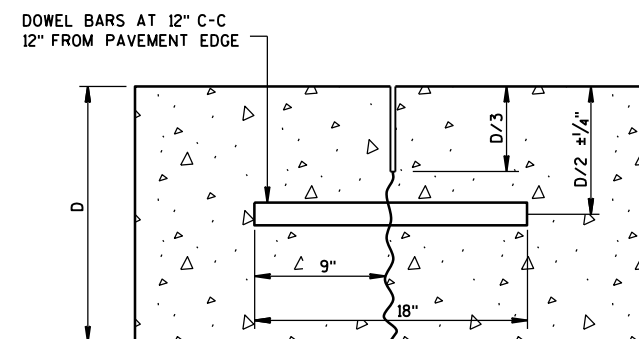
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



## UNDOWELED-TRANSVERSE



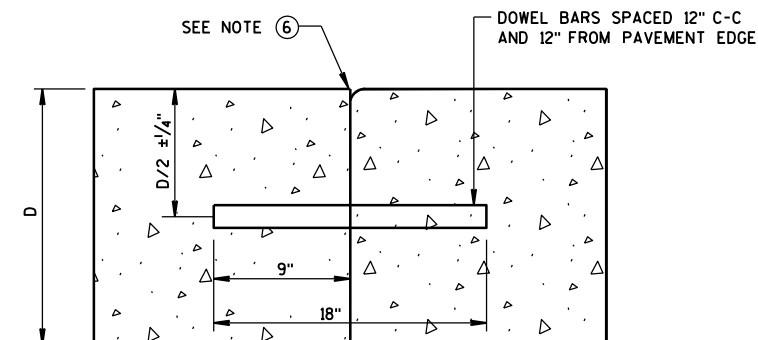
**TIED LONGITUDINAL**



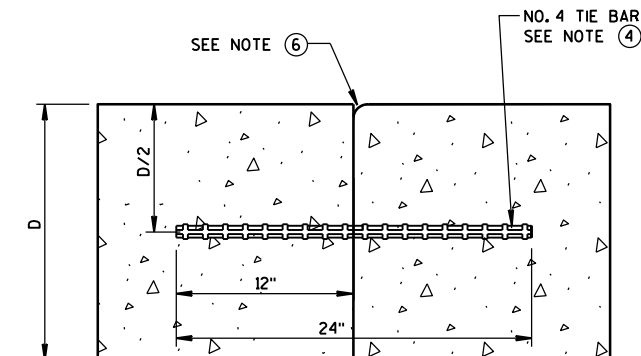
## DOWELED-TRANSVERSE

## CONTRACTION JOINTS

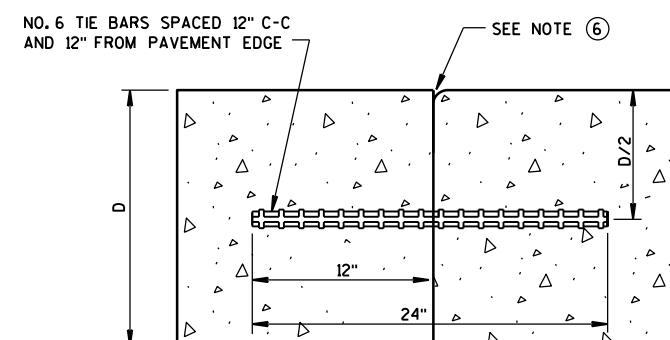
SEE NOTE (2)



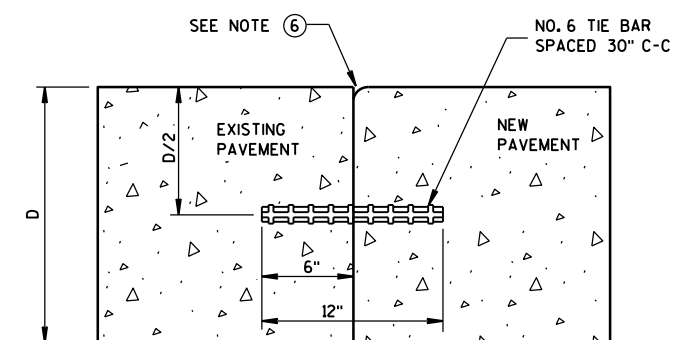
**DOWELED TRANSVERSE**



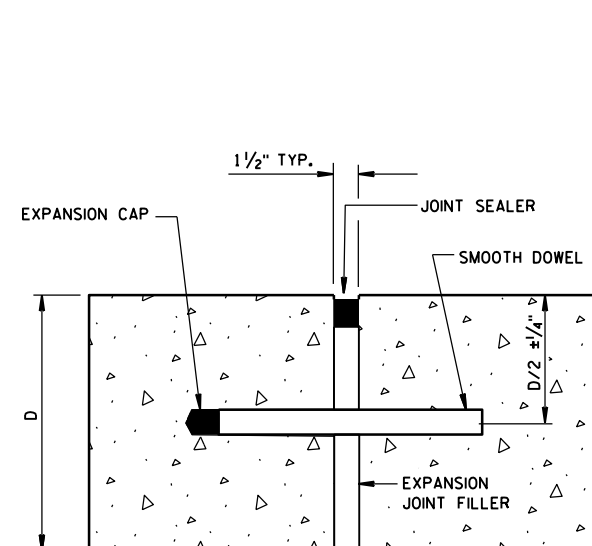
**TIED LONGITUDINAL**



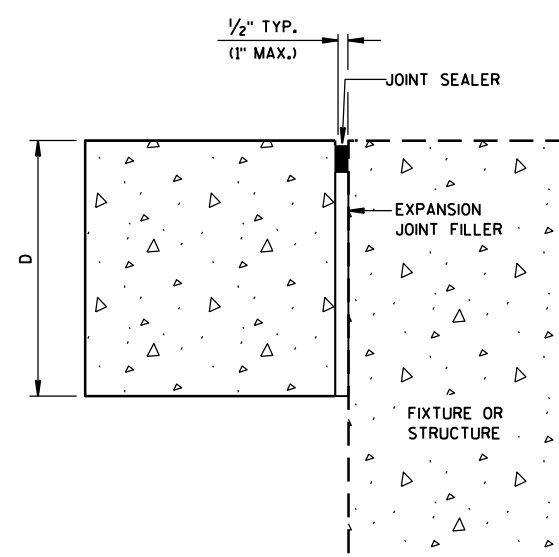
**TIED TRANSVERSE**  
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



**TIED LONGITUDINAL TO EXISTING**



**DOWELED-TRANSVERSE**  
SEE NOTE (1)



## UNTIED-LONGITUDINAL

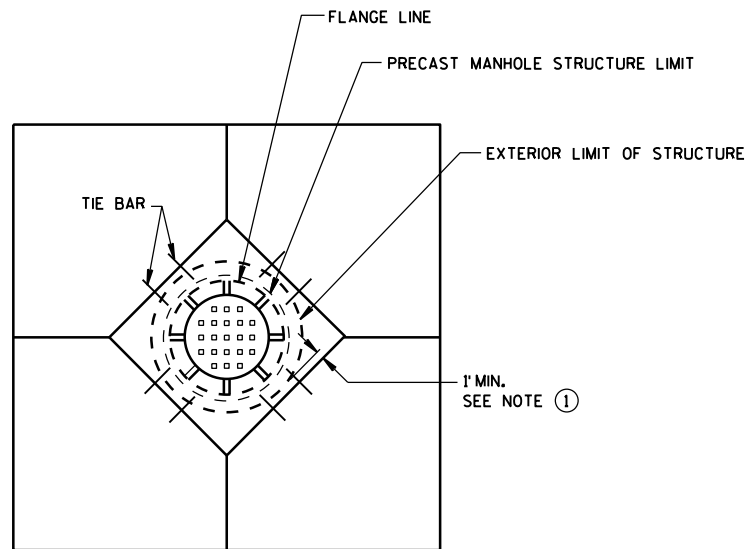
## EXPANSION JOINTS

## CONSTRUCTION JOINTS

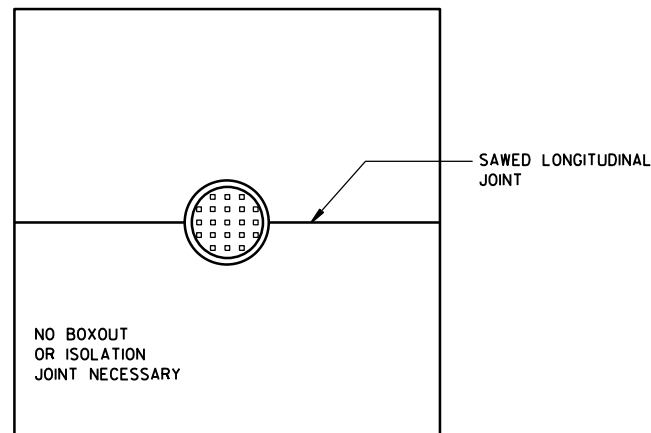
SEE NOTE (5)

## GENERAL NOTES

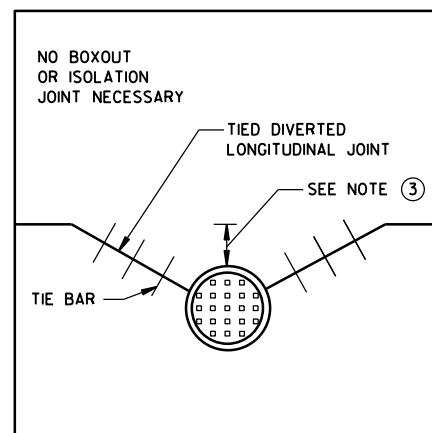
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



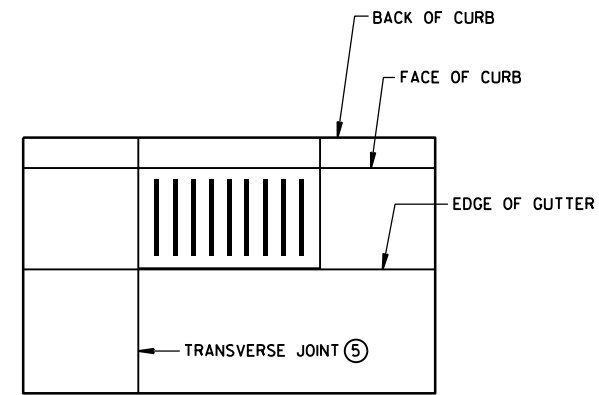
**DIAGONAL MANHOLE BOXOUT  
FOR CONSTRUCTION JOINTS**



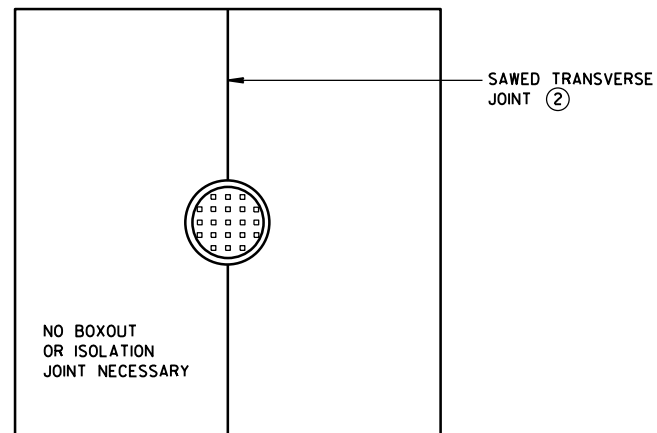
**MANHOLE WITH  
LONGITUDINAL JOINT**



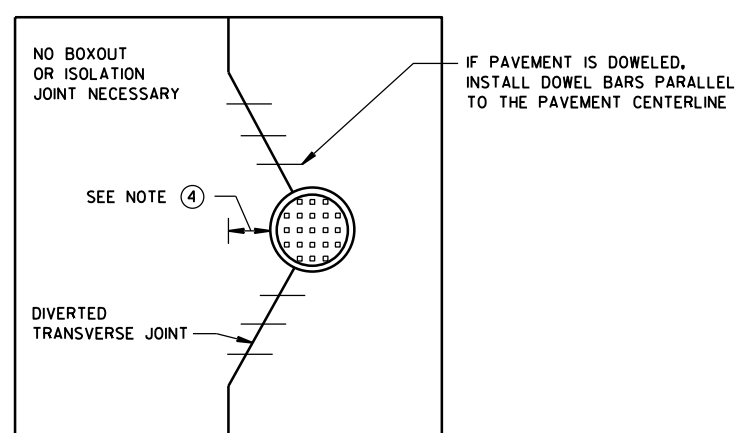
**MANHOLE WITH DIVERTED  
LONGITUDINAL CONTRACTION JOINT**



**INLET WITH  
TRANSVERSE JOINT**



**MANHOLE WITH  
TRANSVERSE JOINT**



**MANHOLE WITH DIVERTED  
TRANSVERSE CONTRACTION JOINT**

**GENERAL NOTES**

- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ④ IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

**CONCRETE PAVEMENT  
JOINTING AT UTILITY FIXTURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013  
DATE

FHWA

/S/ Deb Bischoff  
PAVEMENT POLICY & DESIGN ENGINEER



## LEGEND

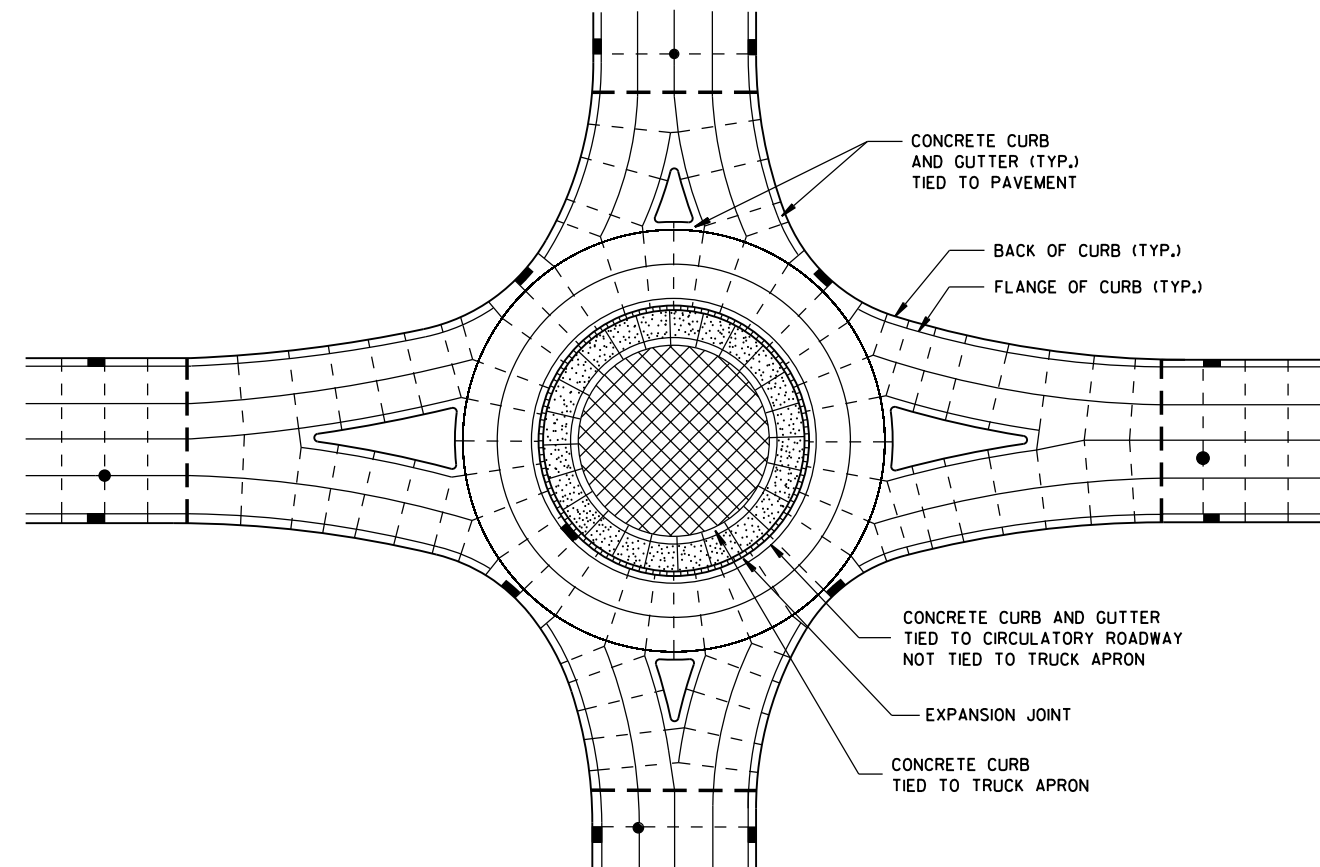
- — DOWELED JOINT
- — TIED JOINT
- — EXPANSION JOINT
- — POTENTIAL DOWELED EXPANSION JOINT
- ▨ TRUCK APRON
- ▨ CENTRAL ISLAND
- • UTILITY STRUCTURES

## GENERAL NOTES

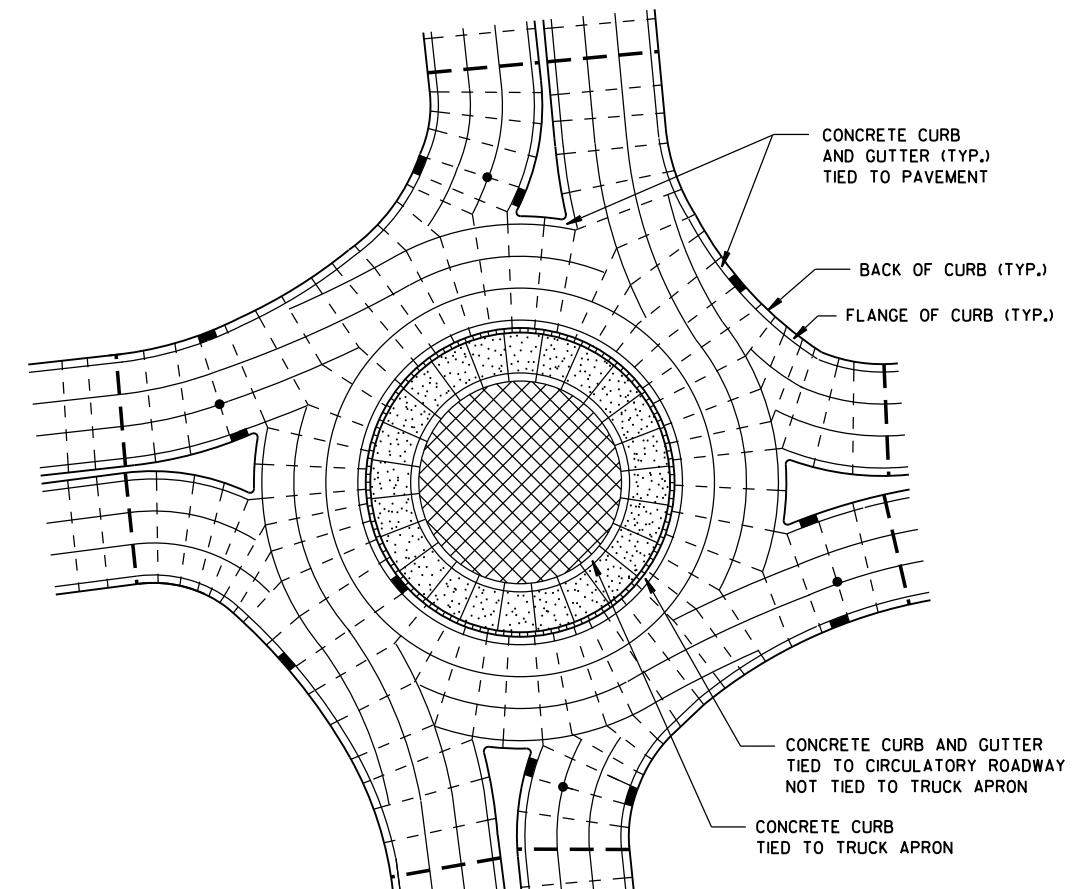
MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

CONCRETE PAVEMENT JOINTING  
AND STEEL REINFORCEMENT  
IN ROUNDABOUTS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013  
DATE

/S/ Deb Bischoff  
PAVEMENT POLICY & DESIGN ENGINEER

FHWA

*Concrete Pavement Jointing***References:**[FDM 14-10-10](#)[FDM 14-10-35](#)**Bid items associated with this drawing:**

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
320.0100 - 0199	Concrete Base (inch) .....	SY
320.0300 - 0399	Concrete Base HES (inch).....	SY
415.0060 - 0199	Concrete Pavement (inch) .....	SY
415.1080 - 1199	Concrete Pavement HES (inch).....	SY

**Standardized Special Provisions associated with this drawing:**

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

**Other SDDs associated with this drawing:**

<a href="#">SDD 13c1</a>	Concrete Pavement Longitudinal Joints and Ties
<a href="#">SDD 13c4</a>	Urban Non-Doweled Concrete Pavement
<a href="#">SDD 13c11</a>	Rural Doweled Concrete Pavement
<a href="#">SDD 13c13</a>	Urban Doweled Concrete Pavement

**Design Notes:**

Include this SDD along with SPV.0105.XX, *Concrete Pavement Joint Layout* (located at <http://roadwaystandards.dot.wi.gov/standards/gmp/jointlayout.pdf>), whenever the plans include concrete pavement or concrete base. Always include sheets "a", "b", "c", and "d" together in plan sets. Sheet "e" is only needed if the project includes a roundabout. For unique project circumstances that are not covered in this set of SDDs, the contractor shall review the joint layout plan with the engineer.

**Contact Person:**

Deb Bischoff: (608) 246-7957